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Forest Certification - Forest Management

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Report Highlights: In September 2007, the State Forestry Administration of the People's Republic of China published a new forestry standard that applies to forestry certification and forest management practices. This standard details the auditing and assessment criteria necessary for certification of sustainably produced forestry products. This report contains an OFFICIAL TRANSLATION provided by the Chinese Government.

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Executive Summary: In September 2007, the State Forestry Administration of the People's Republic of China published a new forestry standard that applies to forestry certification and forest management practices. This standard details forest management practices, performance measurements, and auditing and assessment criteria relating to certification of sustainably produced forestry products. This report contains an OFFICIAL TRANSLATION provided by the Chinese Government.

BEGIN TRANSLATION

**Standard in Forestry Sector of the People's Republic of China
Forest Certification---Forest Management**

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Introduction

Appendix A lists the national laws and regulations abided by forest management, Appendix B lists the relevant binding international conventions and agreements to which China is a signatory.

Appendix A and Appendix B are informative appendices.

The Standard was proposed by the State Forestry Administration, P. R. China.

The Standard is subject to the centralized management of the Chinese Academy of Forestry.

The drafting agencies of the Standard include: The Research Institute of Forestry Science and Information of the Chinese Academy of Forestry, the Research Center of Sustainable Forest Development of the Chinese Academy of Forestry, Science and Technology Development Center of the State Forestry Administration, P. R. China.

The key drafters of the Standard are: Zhang Shougong, Lu Wenming, Xu Bin, Zhao Jie, Yu Ling, Liu Kailing and Guan Baijun.

This is the first release of the Standard.

The right to interpret the Standard hereof rests on the State Forestry Administration, P.R. of China.

Forest Certification: Forest Management

1. Scope

The Standard prescribes the principles, criteria and indicators that shall be followed by the certification of sustainable forest management and the performance requirements that forest management unit shall realize in order to achieve sustainable forest management.

The Standard is applicable to the auditing and assessment of the forest management status of all the forest management units throughout the country conducted by accredited

independent certification bodies. The standard is an integrated whole, with all principles interconnected and balanced and the order arrangement irrelevant to the importance.

2. Terms and definitions

The following terms and definitions are applied to the Standard.

2.1 Forest certification

As a tool to promote sustainable forest management through market mechanism, forest certification includes two basic components, forest management certification and chain of custody (COC) certification. Forest management certification is to testify whether a forest is managed sustainably by assessing the forest management activities of the forest management unit. COC certification covers the whole process throughout the production and circulation of forest based products so as to verify the origin of the raw materials involved thereof. In other words, CoC certification is a comprehensive assessment on each of the links ranging from the processing, manufacturing, transportation, storage through sales of forest based products to the final consumers.

2.2 Forest management

Forest management is a floorboard of the production and management activities of scientifically breeding existing forests for the purpose of increasing the output and improving the quality of the forest.

2.3 Chain of custody

Chain of custody is the supervision process of all the links from the forest to consumers that raw materials, processed semi-finished products and finished products have passed through, including all the stages of processing, manufacturing, transport, storage and sale.

2.4 Sustainable forest management

Sustainable forest management is, through the scientific and rational management of the existing and potential forest ecosystem, to maintain the health and vitality of the forest ecosystem, conserve its biodiversity and ecological functions so as to satisfy the demand for forest products and its environmental service function in the process of social-economic development and guarantee and promote the sustained and coordinated development of population, resources, environment and society, and the economy.

2.5 Forest management unit

Forest management unit is an enterprise, government organ, consortium or its certain part or association, who is engaged in forest management activities in the forest-covered areas with clear boundaries according to the forest management plan and management targets, regardless of its legal personality, public or private.

2.6 Forest management plan

Forest management plan is a document programmed and designed for the scientific arrangement of forest management activities with the sustainable use of forest as its objective.

2.7 Forest tenure

Forest tenure includes the ownership and the use right of forests, trees, and forest land. The owner or user of the forest, trees and forest land has the rights to possess, use, benefit from and dispose them.

2.8 Local community

Local community is the social group composed by residents inhabiting in the forest or surrounding areas, whose interests touched by the forest.

2.9 Stakeholder

Stakeholder is an association or individual who has direct or indirect interests related to or impacted by forest management, e.g. government organs, local communities, forest laborers, investors, environmental protection organizations, consumers and the general public.

2.10 Certification body

Certification body hereby means forest certification body, a third-party organ with certain capacity and qualification and accredited by the state accreditation organ, audits and assesses the forest management status or timber processing of forest management units and the chain of custody of trading enterprises according to the forest certification standards and chain of custody (COC) standards.

2.11 Protected zone

Projected zone is an area under special protection for its ownership of representative natural ecosystem, rare and endangered wild fauna and flora and genetic resources for the purpose of preserving rare biological resources and meet the demand of scientific research. The protected zone can be a nature reserve established by the state or local government or a national forest park as well as an area set up by the forest management unit at its own initiative.

2.12 Forest monitoring

Forest monitoring refers to the constant or periodic measurement and assessment of the forest in terms of management operations, environmental impacts and social influence of the forest.

2.13 Silviculture

Silviculture means the forest operations, tending measures and timber production that satisfy the forest management targets to the largest extent by optimizing the structure and growth of the forest.

2.14 Cutting license

Cutting license is the lawful document that permits forest or timber harvest activities.

2.15 Environmental impact assessment

Environmental impact assessment is a process of assessing the actual or potential impacts of forest management on the environment so as to mark out how to reduce or avoid negative impacts and expand positive ones. The forest management unit can assess the environmental impacts by themselves except for the cases to be conducted by qualified environmental impact assessment bodies upon relevant laws and regulations.

2.16 Biodiversity

Biodiversity is the diversification, variability and ecological complexity among the biological species and it is the synthesis and generalization of the diversity and complexity of the ecosystem formed by the interaction between the environment and all the flora, fauna and microbe species, their genes and various life-forms on earth.

2.17 Endangered species

Endangered species are the species that gradually decay and reduce and tend to distinct due to the inadaptability to the environment or disturbance of biological factors.

2.18 Threatened species

Threatened species are those species tend to be endangered in all or most part of its distributional areas in the foreseeable future.

2.19 Integrated pest management

Based on economics, biology, and ecology, integrated pest management admits that pathogen and insect are the components of forest ecosystem. It emphasizes to choose optimal technical plan to control pest and disease by systems analysis.

2.20 Chemicals

Chemicals include chemical fertilizer, pesticide, germicide, herbicide and hormone etc. in the forest management.

2.21 Non-timber forest product (NTFP)

Non-timber forest product (NTFP) is the forest product gained from the forest except for timber, e.g. rosin, mushroom, potherb and other fauna and flora product.

2.22 Natural forest

Natural forest is the forest that naturally spreads or germinates and boasts most of the main features and key elements (e.g. complexity, layer of structure and diversity) of the local ecosystem.

2.23 Native species

Native species is the original and naturally-distributed local tree species.

2.24 Exotic species

Exotic species are those species introduced from outside the distributional area.

2.25 Invasive species

The invasive species are species boasting the following characteristics simultaneously: 1) introduced from outside the distributional area; 2) capable of reproducing by themselves in the local natural or artificial environment; 3) Apparently damaging or influencing the local ecosystem or geographic structure.

2.26 Habitat

Habitat is the ecological environment where an animal or plant community inserts and distributes.

2.27 Landscape

Landscape is a geographic compound of ecosystems formed by the interacting geology, landform, soil, climate, biology and human beings.

2.28 Forest fragmentation

Forest fragmentation refers to the process that uninterrupted forest cover is divided by non-forest area into forest fragments.

3. National legal framework

Forest management unit shall respect all applicable laws of China and international conventions and agreements to which China is a signatory.

3.1 Abiding by all the relevant laws of China

3.1.1 Texts of existing national laws shall be available in the forest management unit, such as the Forest Law of the People's Republic of China, Regulations for the Implementation of Forest Law of the People's Republic of China etc. (see Appendix A).

3.1.2 Forest management shall be in line with relevant laws and regulations of the state.

3.1.3 Managers and laborers of the forest management unit have adequate knowledge of relevant laws and regulations of the state.

3.1.4 Forest management units that ever violated laws have take correcting measures timely according to law, which is kept on file.

3.2 Taxes and fees paid in conformity with the law.

3.2.1 Managers of the forest management unit are well informed of the taxes and fees that shall be paid.

3.2.2 Taxes and fees shall be paid timely and in accordance with the law.

3.3 Protecting the forest area from illegal logging, illegal settlement, deforestation and other unauthorized activities

Forest management unit has taken effective and tangible measures to protect the forest area from illegal logging, illegal settlement, deforestation and other unauthorized activities.

3.4 Protecting forest land according to law and prohibiting the illegal conversion of forest land

3.4.1 Activities of occupying, expropriating and converting forest land shall comply with relevant laws and regulations upon the written approval of relevant agencies.

3.4.2 The conversion of the forest land shall not damage the integrity of the forest ecosystem and result in the fragmentation of the forest.

3.5 Abiding by international conventions and agreements to which China is a signatory

Forest management unit shall respect relevant clauses of international conventions and agreements concerning forest management and to which China is a signatory. (See Appendix B)

4. Principle 2: Forest tenure

The long-term tenure or use right of forests, trees and forest land shall be clearly defined, filed and forms into legal document.

4.1 Clear forest tenure

4.1.1 Forest management unit shall have the forest tenure certificate issued by the responsible agencies such as government above the county level or the forestry administration department authorized by the State Council. The ownership and use right of forests, trees and forest land shall be clearly defined.

4.1.2 Contractors or leaser have relevant legal certificates, e.g. land contracts and lease agreements.

4.1.3 Forest management unit has clear boundary and mark it on the map.

4.2 Settling disputes over the ownership and use right of forests, trees and forest land according to law.

4.2.1 Disputes over the ownership and use right of the forests, trees and forest land shall be resolved according to the Dispute Settlement of Forest Trees and Forest land tenure.

4.2.2 Existing disputes and conflicts haven't significant negative impacts on forest management. Forest management units significantly impacted by disputes and interest conflicts shall not pass forest certification.

5. Principle 3: Local community and laborer's rights

Forest management unit shall recognize the legal right of local community to use and manage the land and resources, respect the customs and habits of local residents, safeguard and improve the long-term social and economic benefits of laborers and local community.

5.1 Providing the forest area and surrounding residents with opportunities of employment, training and other social services.

Forest management unit has provided opportunities of employment, training and other social services to the forest area and surrounding residents.

5.2 Abiding by all applicable laws and regulations concerning labor and safety and guarantee the health and safety of the employees.

5.2.1 The health and security of the forest laborers shall be guaranteed in accordance with the requirements of the Labor law of People's Republic of China, Law on Production Safety of the People's Republic of China and other applicable laws and regulations.

5.2.2 Forest management unit shall provide laborers with salary and other welfare, e.g. social security, pension, medical services etc. according to laws and regulations.

5.2.3 Operation safety of laborers engaging in forest management shall be guaranteed, necessary uniforms and safety facilities shall be equipped and emergent medical treatment and necessary security training shall be provided.

5.3 Guaranteeing the legal rights and interests of the employees and encouraging their participation in the decision-making process of forest management

5.3.1 The legal rights and interests of employees shall be guaranteed by means of employee congress, congress of employee representatives or labor's union.

5.3.2 Forest laborers shall be provided with opportunities to participate in decision-making of forest operations through various channels.

5.4 Forest management unit shall not encroach upon the legal rights of local residents on trees and other resources

5.4.1 Forest management unit shall not take appropriate measures to prevent the resources of local residents from being directly or indirectly damaged and their use right being impacted by forest management.

5.4.2 If local residents voluntarily entrust the resource management right to the forest management units, clear agreements or contracts shall be signed by both sides.

5.5 Local residents shall be consulted when it is necessary to zone and protect forest land with special cultural, ecological, economic or religious significance to them.

5.5.1 Local residents shall be consulted and consensus shall be reached when it is necessary to zone and protect forest land with special cultural, ecological, economic or religious significance them (especially in the agglomeration of ethnic groups).

5.5.2 Appropriate measures shall be taken to protect the above-mentioned forest land.

5.6 Respecting and safeguarding the traditional or authorized rights of local residents to enter into or use forest preconditioned by guaranteeing the legal rights and interests of the forest management unit

5.6.1 Under the condition of not impacting the integrity of the forest ecosystem and the fulfillment of forest management targets, the traditional and authorized right of local residents to enter into or use forest, such as picking forest products, entertaining, passing, environmental education etc..

5.6.2 Regulations shall be clearly defined and informed by local residents if there are forests that can only be entered into or used at certain circumstances or at a certain time.

5.7 In the case that forest management results in the loss of or negative impacts on the legal right, property, resources, or life of local residents, they shall be consulted and fairly compensated.

5.7.1 Appropriate measures shall be taken to avoid the loss of or damage to the legal right, property, resources, or life of local residents.

5.7.2 Local residents shall be consulted and fairly compensated if the above-mentioned damages take place.

5.8 Traditional knowledge of local residents shall be respected and paid when used.

5.8.1 Traditional knowledge of local residents shall be respected and rationally used in the forest management.

5.8.2 Local residents participating in forest management planning shall be appropriately paid.

5.9 Forest management plan shall be adjusted according to the results of social impact evaluation and consultation mechanism shall be established in cooperation with local communities.

5.9.1 Social impact of forest management shall be assessed according to its scale.

5.9.2 Results of the social impact evaluation shall be considered in the forest management plan and operation plan.

5.9.3 Communication and consultation mechanism shall be built with relevant agencies through local communities.

6. Principle 4: Forest management plan

Forest management unit shall develop and implement scientific forest management plan, define the targets and measures of forest management and constantly adjust and perfect it during the implementation.

6.1 Forest management plan shall be made and implemented based on the long-term forestry layout developed by superior forestry administrations.

6.1.1 Forest management unit has timely, effective and scientific forest management plan.

6.1.2 Opinions of administrations, management units, local communities and other stakeholders are extensively solicited in the process of developing forest management plan.

6.1.3 The development of forest management plan is based on sound and correct information on forest resource, including updated forest resource files, effective results of second-grade forest resource inventory and specialized technical files.

6.1.4 The forest management plan and its supporting documents shall include:

- Natural socio-economic status, including forest resources, environmentally limiting factors, land use and ownership status, socio-economic conditions, social development and dominant demands, forest management evolution and a profile of adjacent land status.
- Evaluation of forest resource management.
- Forest management guidelines and targets.
- Forest function zoning, forest categories and forest management types.
- Forest breeding and silviculture, including seedling production, reforestation, tending and forest stand improvement.
- Forest harvest and regeneration, including annual harvest area, harvest volume, harvest intensity, timber output volume, harvest method, logging area allocation and reforestation operation etc.
- Non-timber resources management.
- Forest and environmental protection, including forest disease and pest control, forest fire prevention, soil conservation, control of chemicals and toxic substances, occupation of forest land etc.
- Wildlife conservation, especially the rare, threatened and endangered species.

- Development and maintenance of infrastructures of forest management.
- Investment estimation and benefit analysis.
- Ecological and social monitoring measures and impact evaluation of forest management.
- Guarantee measures of the implementation of the forest management plan.
- Necessary charts related to forest management.

6.1.5 Annual operation plan shall be developed based on the forest management plan.

6.2 Revising the forest management plan timely

6.2.1 Latest development of science and technology and policy trends related to forest management shall be learned timely.

6.2.2 Forest management plan shall be periodically revised (5-10 years) according to forest resource monitoring results, new information and policies on science and technology and environmental, social and economic circumstances.

6.3 Forest operations are consistent with the operation design.

6.3.1 Forest operations are consistent with the operation design.

6.3.2 Appropriate adjustments are proper with the precondition that the management activities are guaranteed to be more conducive to realizing management targets and safeguarding the integrity of the forest ecosystem.

6.3.3 Adjustments to the forest management plan shall be put on file.

6.4 Necessary training and guidance shall be provided to forest employees to ensure that they are capable of operating correctly.

6.4.1 Forest management unit establishes system on providing forest employees with training and guidance.

6.4.2 Forest employee shall receive sound training, understand and grasp the operation requirements.

6.4.3 Professional technicians provide forest employees with necessary technical guidance in their field operation.

6.5 Give public notice of primary elements of the forest management plan with the premise of respecting information confidentiality.

While respecting the confidentiality of information, forest managers shall give public notice of the primary elements of the forest management plan to the local communities or relevant agencies.

7. Principle 5: Silviculture

Forest management unit shall conduct silviculture activities according to the principle of sustainable development, breed, protect and use forest resources in a scientific and efficient manner and develop diversified forest products.

7.1 Forest management shall strive toward economic benefits, while taking into full account of the environmental and social costs of the production and ensuring the necessary investment to maintain the productivity of the forest ecosystem.

7.1.1 Forest management shall take into full consideration of its management and operation costs and be ensured to be economically viable.

7.1.2 Rational investment scale and structure shall be guaranteed for sustainable forest management.

7.2 Forest management unit shall conduct diversified economy in the forest area so as to promote the development of local economy.

7.2.1 The diversified economy, sustainable use of various timbers and non-timber forest products shall be conducted, such as forest fruit, oil plants, food, beverages, herbs and chemicals etc.

7.2.2 Management plan of important non-timber forest products shall be made, including measures on the breeding, protection and use.

7.3 Introduction, production and management of seeds and seedlings shall be in line with national laws or local regulations and the quality of seeds and seedling shall be guaranteed.

7.3.1 Introduction, production and management of forest seeds and seedlings shall be in line with the requirement of national laws or local regulations.

7.3.2 Units engaged in forest seedling production and management shall gain Forest Seeds Production License and Forest Seeds Management License issued by forestry administration above the county level and conduct production and management activities according to the requirements of the licenses.

7.3.3 Quality check shall be made according to the national or local standards before transferred and transplanted from the nursery and quality check certificate of forest seeds and seedlings shall be filled in.

7.3.4 Quarantine and Approval Document of Introducing Tree Seeds and Seedlings and other Propagating Materials issued by the State Forestry Administration, P.R. China or the forestry departments of various provinces, autonomous regions or municipalities shall be gained prior to the introduction of forest seeds, seedlings and other propagating materials (including fruit trees, flowers, herbs and grass seed for greening and soil conservation). And quarantine shall be conducted according to relevant regulations.

7.4 Tree species suitable to local conditions shall be selected for afforestation in line with the management targets and indigenous species shall be prioritized. Exotic species shall be used cautiously. Monitoring shall be made on the growth status, disease and pest and impacts on ecological environment after exotic tree species are used for afforestation.

7.4.1 Afforestation species shall be selected based on the management targets and the principle of proper tree species for proper sites.

7.4.2 Indigenous tree species shall be selected with priority.

7.4.3 Introduction of exotic species is limited to those that are not invasive, do not affect the growth of local plants and can make environmental and economic benefits. Monitoring shall be made on their survival rate, preserving rate, disease and pest, and environmental impacts.

7.5 Afforestation design and operation in forest-free area (including land without standing forest and land suitable for afforestation) shall meet the local land conditions and management targets and shall be conducive to improving the benefits and stability of the forest.

7.5.1 Afforestation design and operation shall be developed according to national and local technical standards and regulations, including Codes for the Design of Afforestation Operations etc..

7.5.2 Afforestation design conforms to management targets and rational afforestation, tending, thinning, final felling and regeneration plan shall be developed.

7.5.3 One or several of the following afforestation measures shall be adopted to promote the diversification of the structure of forest stand and strengthen its stability.

- Using diversified tree species and rationally establishing mixed forest.
- Avoiding intensified felling in a short period in the management design.
- Encouraging afforestation of diversified ages and periods.

7.5.4 Wildlife corridors shall be established based on the scale of forest management and the migrating rules of wildlife.

7.5.5 Afforestation layout and planning is conducive to maintaining and improving the value and features of the natural landscape.

7.5.6 Transfer of forest of the same age to forest of different ages and diversified habitat structure shall be encouraged.

7.6 Forest harvest and regeneration shall be conducted according to law and the consumption of timber and non-timber forest products shall not exceed their capacity of reproduction.

7.6.1 Forest management unit shall make the annual harvest plan and annual harvest quota based on the principle of rational management, sustainable use and timber consumption volume less than growth volume and submit it to the superior forest administration for approval.

7.6.2 Timber harvest can only be conducted with harvest license and according to its regulations.

7.6.3 Record shall be kept on timber harvest volume and sites.

7.6.4 Forest harvest and regeneration follow the requirements of New Regulations on Forest Harvest and Regeneration and relevant operation codes of forest harvest of the state.

7.6.5 Use of timber and non-timber forest products shall not exceed the level allowed by sustainable development.

7.7 Forest management shall be favorable to the conservation and regeneration of natural forests.

7.7.1 Effective measures shall be adopted to promote the conservation and regeneration of natural forests.

7.7.2 Natural forests shall not be converted into plantations.

7.7.3. A certain area of forest land shall be kept to promote the gradual transfer to natural forest on the plantations established on the damaged natural forest or secondary natural forests according to its scale and management targets.

7.7.4 Eco-function-oriented plantations established on the neighboring area of natural forests shall be guided to gradually transfer from the landscape and structure of plantations to those of natural forests and to be conducive to natural forest protection.

7.8 Forest management shall minimize the waste and damage to resources.

7.8.1 Approaches with the least environmental impacts shall be adopted in forest management operations so as to reduce the damage to the forest resources and environment.

7.8.2 Measures shall be taken to reduce the waste and degrading of the timber grade in the process of timber harvest and production.

7.9. Optimal use and further processing of timber and non-timber forest products shall be encouraged.

7.9.1 Measures shall be made and implemented to promote the best use of timber and non-timber forest products (NTFPs).

7.9.2 Further processing of timber and non-timber forest products (NTFPs) shall be encouraged to improve their added value.

8. Principle 6: Biodiversity conservation

Forest management shall help to conserve and improve the biodiversity, protect typical and fragile forest ecosystem, maintain and improve the structure of the forest ecosystem.

8.1 Protected zone compliant to the scope and scale of forest management and the features of resources in need of protection shall be established and protective measures shall be made accordingly when rare, threatened and endangered species exist.

8.1.1 The rare, threatened and endangered species and their habitats within the area shall be identified and marked on the map.

8.1.2 Certain protected zone and biological corridor shall be lined out to serve as habitats of the rare, threatened and endangered species in accordance with the local conditions. If the protected zone and biological corridors can't be clearly mapped out, adequate area shall be kept for each forest type. Zoning of the above-mentioned sites shall take into full consideration of the wildlife migration in the forest.

8.1.3 Protective measures of the protected zones shall be made accordingly

8.1.4 Species banned by the national laws and regulations, international conventions or agreements shall not be developed or utilized.

8.2 Unauthorized hunting, trapping and collecting practices shall be controlled.

8.2.1 Hunting, trapping and collecting activities shall be consistent with laws and regulations on wildlife protection. Hunting license and collecting license shall be applied in accordance with the law.

8.2.2 Hunting, trapping and collecting activities shall follow the quota regulations of the state in hunting and collecting volume.

8.3 Typical forest ecosystems shall be protected and their natural status shall be maintained.

8.3.1 Typical forest ecosystems shall be identified through inventory within the forest management unit.

8.3.2 Measures on the typical ecosystem protection shall be made.

8.3.3 Protective measures shall be implemented to maintain the natural status of the typical ecosystems.

8.4 Measures on restoration, conservation and improvement of biodiversity of the forest shall be taken in forest management.

The following measures can be considered in the forest management to maintain and improve the biodiversity.

- Select operation methods that can reduce the negative impacts.
- Adopt suitable forest breeding system
- Maintain and improve the natural features of the forest.

9. Principle 7: Environmental impact

Forest management shall consider its impacts on environment, bring the service function of the forest into full play and be conducive to environmental protection and improvement.

9.1 Forest management shall consider its impacts on the ecological environment.

9.1.1 Forest management unit can make first-party, second-party or third-party environmental impact assessment on the forest management operations based on the scale and intensity of forest management and features of resources.

9.1.2 Forest management patterns shall be adjusted in accordance with the assessment results in order to reduce the impacts on the forest ecosystem made by forest management operations.

9.2 Various protective measures shall be taken in forest management operations so as to maintain the natural features of forest land, protect the water resources and prevent the land degradation.

9.2.1 Effective measures shall be taken to minimize the damages to forest land caused by such human activities as land preparation, afforestation, timber harvest, regeneration, road construction etc. in order to maintain the natural features of the soil and its long-time productivity in the forest.

9.2.2 Negative impacts on the quality and quantity of water resources shall be reduced, soil and water erosion shall be controlled and severe damages to the catchments in the forest shall be avoided.

9.2.3 Adequate buffering zone shall be built to conserve water and soil at the bank of rivers and streams.

9.2.4 Organic and biological fertilizer shall be used to the best to enhance soil fertility and the use of chemical fertilizer shall be reduced.

9.3 The use of chemicals shall be strictly controlled and the environmental impacts caused accordingly shall be minimized

9.3.1 Chemical pesticide banned by national laws and international conventions shall not be used.

9.3.2 Proper equipments and technical training shall be provided to minimize the pollution to the environment and damages to people's health of the use of chemicals.

9.3.3 Methods consistent with the requirements of environmental protection shall be adopted to dispose the wastes and containers of chemicals.

9.4 Introduction of exotic species shall be strictly controlled and negative ecological impacts brought by invasive species shall be prevented.

9.4.1 Exotic species can only be introduced with the precondition that they have passed strict quarantine and are guaranteed to do no harm to the environment and biodiversity.

9.4.2 Record shall be kept on the use of exotic species and their ecological impacts shall be monitored.

9.4.3 Measures on controlling the harmful invasive species shall be made and implemented.

9.5 The environmental service function of the forest shall be maintained and improved in forest management operations.

9.5.1 Forest managers understand and identify the environmental service function of the forest in the forest management area, such as forest carbon sequestration, entertaining, eco-tourism, landscape aesthetics, education, scientific research, fishery and animal husbandry resources etc.

9.5.2 Measures shall be taken to maintain and improve the relevant value and service function of the forest.

10. Principle 8: Forest Protection

Forest management unit shall prevent the forest from the damages caused by disease, pest and forest fires and safeguard the health and safety of the forest.

10.1 Disease and pest control plan shall be made on the basis of silviculture measures and biological, chemical and physical methods shall be adopted to conduct integrated pest management.

10.1.1 Disease and pest control measures shall conform to the requirement of Regulations on Forest Pest Control of the People's Republic of China.

10.1.2 Prediction and forecast shall be made to assess the potential influence of disease and pest on the forest and prevention and control plan shall be developed accordingly.

10.1.3 Integrated pest management measures shall be employed which focus on silviculture measures and incorporate biological, chemical and physical prevention. The use of chemical pesticide in the forest shall be limited to reduce its impacts on the environment.

10.1.4 Effective measures shall be employed to protect the various beneficial organisms in the forest and improve its own pest control capacity.

10.2 Sound forest fire prevention system shall be established and fire prevention measures shall be made and implemented.

10.2.1 Forest fire prevention system shall be established on the basis of Regulations on Forest Fire Prevention of the People's Republic of China.

10.2.2 Areas of different grades of forest fire risk shall be zoned.

10.2.3 Measures on forest fire monitoring (included into "early warning") and control shall be made and implemented.

10.2.4 Forest fire control facilities shall be built, forest fire control organizations shall be established and the work of forest fire control and fighting in the unit shall be organized.

10.2.5 Statistics of forest fires shall be kept and forest fire shall be kept on file.

11. Principle 9: Forest monitoring

Forest management unit shall monitor and evaluate the forest status, forest products, management activities and their social and environmental impacts.

11.1 Establishing forest monitoring system and forest resource files and monitoring forest resources continuously or periodically

11.1.1 Forest resource inventory shall be conducted and forest resource files shall be established according to the unified arrangement of superior forestry administration.

11.1.2 Based on the scale and intensity of forest management activities and the local conditions, proper monitoring system and procedures shall be established and approaches, frequency and intensity of forest monitoring shall be clearly defined.

11.1.3 Monitoring activities shall be made continuously or periodically in accordance with the monitoring system.

11.1.4 Monitoring results shall be compared, analyzed and evaluated.

11.1.5 Monitoring results shall be reflected in developing or revising forest management plan and operation plan.

11.2 Forest monitoring shall cover the resource status, forest management and its social and environmental impacts.

11.2.1 Forest monitoring shall include:

- Stock volume, yield and resource consumption volume of main forest products.
- Structure, growth, regeneration and health condition of the forest.
- Varieties of wild fauna and their changing trends.
- Dynamics and trends of disease, pest and forest fires.
- Environmental and social impacts of timber harvest and other management activities.
- Costs and benefits of forest management.
- Implementation status of the annual operation plan.

11.3 Files on timber tracking management shall be kept in order to guarantee the origin of forest products can be traced.

The whole process from timber harvest, transport, processing and sale shall be tracked, recorded and marked. Tracking management files of timber and other important forest products shall be kept.

11.4 Releasing the summary of monitoring results to the public

11.4.1 While respecting the confidentiality of information, summary of monitoring results shall be released to the public periodically.

Appendix A

(Relevant Materials)

Relevant National Laws, Administrative Regulations and Rules

A.1 Laws

Forest Law of the People's Republic of China (1984, revised in 1998)

Sandification Prevention and Control Law of the People's Republic of China (2001)

Water Law of the People's Republic of China (1998)
Soil and Water Conservation Law of the People's Republic of China (1991)
Law on Water Pollution Prevention and Control of the People's Republic of China (1984, revised in 1996)
Land Management Law of the People's Republic of China (1999)
Wildlife Conservation Law of the People's Republic of China (1988)
Seed Law of the People's Republic of China (2000)
Labor Law of People's Republic of China (1994)
Worker's Union Law of the People's Republic of China (1992, revised in 2001)
Property Right Law of the People's Republic of China (2007)
Rural Land Contracting Law of the People's Republic of China (2003)
Safe Production Law of the People's Republic of China (2002)
Environment Impact Assessment Law of the People's Republic of China (2002)
Environment and Natural Resources Protection Law of the People's Republic of China (2001)
Animal Epidemic Prevention Law of the People's Republic of China (1997)
Flood Control Law of the People's Republic of China (1997)
Law on Imported and Exported Fauna and Flora Quarantine of the People's Republic of China (1991)
Law on Hunting Gun and Bullet Management of the People's Republic of China (1993)
Law on Promoting the Transfer of Science and Technological Achievements of the People's Republic of China (1996)

A.2 Regulations

Regulations for the Implementation of the Forest Law of the People's Republic of China (1986, revised in 2000)
Regulations on Nature Reserves of the People's Republic of China (1994)
Regulations for the Implementation of Terrestrial Wildlife Conservation (1992)
Regulations on Wild Flora Conservation of the People's Republic of China (1997)
Regulations on Protecting New Plant Varieties of the People's Republic of China (1997)
Regulations for the Implementation of the Soil and Water Conservation Law of the People's Republic of China (1993)
Regulations on Converting Cropland to Forests of the People's Republic of China (2003)
Regulations for the Implementation of the Land Management Law of the People's Republic of China (1999)
Regulations on Forest Disease and Pest Control of the People's Republic of China (1989)
Regulations on Forest Fire Prevention of the People's Republic of China (1988)
Regulations on Seed Management of the People's Republic of China (1989)
Regulations for the Implementation of the Law on the Imported and Exported Wild Fauna and Flora of the People's Republic of China (1996)
Regulations on Flood Control of People's Republic of China (1998)

A.3 Administrative Regulations and Rules

Measures for the Registration of Timber and Forest Land Tenure (2001)
Measures for the Verification and Approval of the Occupation and Confiscation of Forest Land (2001)
Measures for Dispute Settlement on Timber and Forest Land Tenure (1996)
Measures for Nature Reserves of Forest and Wildlife Category (1985)
Measures for the Natural Forest Protection Program (2006)
Measures for Forest Harvest and Regeneration (1987)
Measures for Forest Resources Files (1986)
Interim Measures for Afforestation Quality Control (2003)
Interim Regulations on Developing Annual Forest Harvest Quota (1985)
Measures for Seed Quality (2007)
Measures for Prompting the Use of Good Forest Breeds (1997)

Measures for the Package and Label of Forest Seeds (2002)
Measures for the Production and Management License of Forest Seeds (2002)
Regulations on the Annual Verification System of Production and Management License of Forest Seeds (2003)
Measures for the Quality Supervision of Tree Seedling of the State Forestry Administration of China (2002)
Measures for Quarantine Approval of Introducing Exotic Species (1980)
Measures for the Implementation of the Management and Supervision of the State-owned Forest Resources and Assets (Try out) (1996)
Measures for the Implementation of the Regulations on Protecting New Plant Varieties of the People's Republic of China (1999)
Regulations on the Quarantine, Approval and Supervision of Introducing Tree Seeds and Seedlings and other Propagating Materials (2003)
Note: All above-mentioned regulations or rules were released by State Forestry Administration or former Forestry Ministry.

A4. Technical Codes and Guidelines

List of Species and Countries Prohibited Trading Released by CITIES Secretariat (2001)
List of Wild Flora under Priority State Protection (First Group) (1999) (State Forestry Administration and Ministry of Agriculture)
GB/T 18337.3-2001 Technical Codes for the Establishment of Public Benefits Forest (2001)
Outlines for Developing and Implementing Forest Management Plan (2006) (State Forestry Administration)
Guidelines for Sustainable Forest Management in China (2006) (State Forestry Administration)
LY/T1646-2005 Codes for Forest Harvest Operations (2005)
LY/T 1607-2003 Codes for the Design of Afforestation Operations (2003)
LY/T 1706-2007 Technical Codes for Breeding Fast-growing and High-yielding Timber Forest (2007)
GB/T 1690-2004 Technical Codes for Mountain (Sand) Closure (2004)
LY/T 1690-2007 Technical Codes for the Improvement of Low-yielding Forest (2007)
LY/T 1692-2007 Technical Codes for the Importance Evaluation of Genetically-modified Forest Plants and their Products (2007)

Appendix B

(Relevant Materials)

International conventions and agreements to which China is a signatory

Convention on Biological Diversity
Convention on International Trade in Endangered Species of Wild Fauna and Flora
Convention on Wetlands of International Importance Especially as Waterfowl Habitat
United Nations Framework Convention on Climate Change
Convention on International Labor Organization
International Convention for the Protection of New Varieties of Plants
United Nations Convention to Combat Desertification
International Tropical Timber Agreement